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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,025	07/02/2003	Kevin T. Chan	14885US01	5831

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EXAMINER
DAVENPORT, MON CHERI S

ART UNIT	PAPER NUMBER
2416	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/612,025	CHAN, KEVIN T.	
	Examiner	Art Unit	
	MON CHERI S. DAVENPORT	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7-15,17-25 and 27-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *31-33* is/are allowed.

6)☒ Claim(s) *1-5, 7-15, 17-25,and 27-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/17/2009 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1, 11 and 21** rejected under 35 U.S.C. 103(a) as being unpatentable over Cromer et al. (US Patent Application 2004/0223462) in view of Applicant admitted prior art(APA).

Regarding **claim 1, 11, and 21** Cromer et al. discloses a method for providing and configuring secure communication links, the method comprising:

determining any one usable media pair from all existing media pairs of a first device(see [0023], lines the NIC finds a functional signal wires in media) :

wherein the device communicates using at least three media pairs of said all existing media pairs(see figure 3, see[0032], the 4 pair media device)

Cromer et al. fails to specifically point out selecting any one channel from all existing channels, said selected any one channel being different from a general channel assignment

corresponding to said determined any one usable media pair, assigning said selected any one channel to said any one media pair as claimed.

However APA teaches selecting any one channel from all existing channels, said selected any one channel being different from a general channel assignment corresponding to said determined any one usable media pair (see [04], lines 1-6, auto-MDIX reconfigure channels to properly reassign the media pairs to channels, therefore a channel is determined from all existing channels , see also [12], and fig. 1, the first controller and the second controller is independent and all existing channels for each controller is independent); and

assigning said selected any one channel to said any one media pair (see [04], lines 1-6, auto-MDIX reconfigure channels to properly reassign the media pairs to channels) .

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Cromer et al. invention with APA invention because Cromer et al. improves automation in Ethernet LAN's by extending the auto-negotiate process to include a gigabit functional verification when the auto-negotiate process negotiates a gigabit data rate for a particular connection (see Cromer et al. [0015], lines 1-5).

4. **Claims 2-5, 7-10, 12-15, 17-20, 22-25, and 27-30** rejected under 35 U.S.C. 103(a) as being unpatentable over Cromer et al. in view of Applicant's admitted prior art in further in view of Bontemps et al. (US Patent 5,923,663).

Regarding **Claims 2, 12 and 22**, Cromer et al. in view of Applicant's admitted prior art discloses everything as claimed above (see claims 1, 11 and 21).

However Cromer et al. in view of applicant's admitted prior art fails to specifically point out notifying a second device of said assigned any one channel which corresponds to said any one media pair as claimed.

Bontemps et al. teaches notifying a second device(DFF, figure 4) of said assigned any one channel which corresponds to said any one media pair (see figure 4, section DFF(D-type flip-flop),see col. 13-14, lines 60-2, the DFF asserts the Xover_sel1 signal at its output, it receives the assignment signal xover_sel).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Cromer et al. in view of applicants admitted prior art with Bontemps et al. because Bontemps et al. invention provides a solution to achieve the appropriate communication link automatically regardless of cable type (see Bontemps et al. col. 3, lines 39-41).

Regarding **Claims 3, 13 and 23,** Cromer et al. in view of Applicant's admitted prior art in further in view of Bontemps et al. discloses everything as claimed above (see claims 2, 12 and 22).

However Cromer et al. in view of applicant's admitted prior art fails to specifically point out cross-connecting a corresponding channel and media pair for said second device, said cross-connected channel and media pair being equivalent to said selected any one channel assigned to said any one media pair as claimed.

Bontemps et al. teaches cross-connecting a corresponding channel and media pair for said second device, said cross-connected channel and media pair being equivalent to said selected any

one channel assigned to said any one media pair (see col. 13, lines 9-28, table of crossover configurations) .

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Cromer et al. in view of applicants admitted prior art with Bontemps et al. because Bontemps et al. invention provides a solution to achieve the appropriate communication link automatically regardless of cable type (see Bontemps et al. col. 3, lines 39-41).

Regarding **Claims 4, 14, and 24**, Cromer et al. in view of Applicant's admitted prior art discloses everything as claimed above (see claims 1, 11, and 21).

However Cromer et al. in view of applicant's admitted prior art fails to specifically point out negotiating said assignment of said selected any one channel to said any one media pair as claimed.

Bontemps et al. teaches negotiating said assignment of said selected any one channel to said any one media pair (see col. 14, lines 46-53, the DFF is in toggle mode, toggling (reads on negotiating) the xover_sel1 signals)

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Cromer et al. in view of applicants admitted prior art with Bontemps et al. because Bontemps et al. invention provides a solution to achieve the appropriate communication link automatically regardless of cable type(see Bontemps et al. col. 3, lines 39-41).

Regarding **Claims 5, 15, and 25**, Cromer et al. in view of Applicant's admitted prior art discloses everything as claimed above (see claims 1, 11, and 21).

However Cromer et al. in view of Applicant's admitted prior art fails to specifically point out selecting from a plurality of predetermined channel and media pair assignments, a particular one of said channel and media pair assignment as claimed.

Bontemps et al. teaches selecting from a plurality of predetermined channel and media pair assignments, a particular one of said channel and media pair assignment ***(see col. 14, lines 46-53, the link_detect1 signal is asserted, which detects a valid communication link, selected)***

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Cromer et al. in view of applicants admitted prior art with Bontemps et al. because Bontemps et al. invention provides a solution to achieve the appropriate communication link automatically regardless of cable type(see Bontemps et al. col. 3, lines 39-41).

Regarding **Claims 7, 17 and 27**, Cromer et al. in view of Applicant's admitted prior art in further in view of Bontemps et al. discloses everything as claimed above (see claims 6, 16 and 26).

However Cromer et al. in view of applicant's admitted prior art fails to specifically point out securely transferring communication traffic via said communication channel and media pair as claimed.

Bontemps et al. teaches securely (reads on working) transferring communication traffic via said communication channel and media pair (see col. 15, lines 20-24, the automatic media detection circuit, establishes a working communication link).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Cromer et al. in view of applicants admitted prior art with Bontemps et al. because Bontemps et al. invention provides a solution to achieve the appropriate communication link automatically regardless of cable type(see Bontemps et al. col. 3, lines 39-41).

Regarding **Claims 8, 18, and 28,** Cromer et al. in view of Applicant's admitted prior art in further in view of Bontemps et al. discloses everything as claimed above (see claims 7, 17, and 27).

However Cromer et al. in view of applicant's admitted prior art fails to specifically point out securely transferring control information via at least one of said communication channel and media pair as claimed.

Bontemps et al. teaches securely transferring control information via at least one of said communication channel and media pair (see col. 13, lines 29-45, control information is XOVER_SELx and LINK_DETECTx signals).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Cromer et al. in view of applicants admitted prior art with Bontemps et al. because Bontemps et al. invention provides a solution to achieve the appropriate

communication link automatically regardless of cable type(see Bontemps et al. col. 3, lines 39-41).

Regarding **Claims 9, 19 and 29,** Cromer et al. in view of Applicant's admitted prior art in further in view of Bontemps et al. discloses everything as claimed above (see claims 8, 18, and 28).

monitoring at least one of said communication channel and media pair by a second device (see [06] lines 1-4, Ethernet@wirespeed is adapted to detect the conditions on the media and the coupling interface, media pairs are monitored)) ; and

determining said selected any one channel assigned to said any one media pair(see [04], lines 1-6, auto-MDIX reconfigure channels to properly reassign the media pairs to channels)

Regarding **Claims 10, 20 and 30**, Cromer et al. in view of Applicant's admitted prior art in further in view of Bontemps et al. discloses everything as claimed above (see claims 9, 19, and 29).

However Cromer et al. in view of applicant's admitted prior art fails to specifically point out said control information is at least one of authentication information, encryption information, channel setup information and link provisioning and link maintenance information as claimed.

Bontemps et al. teaches said control information is at least one of authentication information, encryption information, channel setup information and link provisioning and link maintenance information (see col. 29-36, the control information LINK_DETECTx and XOVER_SELx, provide channel setup and link information).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Cromer et al. in view of applicants admitted prior art with Bontemps et al. because Bontemps et al. invention provides a solution to achieve the appropriate communication link automatically regardless of cable type (see Bontemps et al. col. 3, lines 39-41).

Allowable Subject Matter

5. **Claims 31-33** allowed.

Response to Arguments

6. Applicant's arguments with respect to claims 1, 11, and 21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MON CHERI S. DAVENPORT whose telephone number is (571)270-1803. The examiner can normally be reached on Monday - Friday 8:00 a.m. - 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin C. Harper/
Primary Examiner, Art Unit 2416

/Mon Cheri S Davenport/
Examiner, Art Unit 2416
April 6, 2009